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ABSTRACT

Federal spending on education has risen steadily over the past three decades to unprecedented levels. However, research indicates that "money neutral" solutions, such as local control and parent choice, are the real keys to educational reform. Educational spending, after correction for inflation, has increased each year since the 1929/30 school year. The United States also spends more on education as a percentage of its gross national product (6.8 percent in 1986) than do most of the countries whose students outperform American students on standardized tests. Yet, of 65 studies on the relationship between expenditures and pupils, only 20 percent found any evidence of the positive impact of spending on learning, 75 percent found no impact, and about 5 percent found a negative impact. Furthermore, 78 percent of studies on reforms based on increased teacher salaries found no impact on student performance; and studies on equalizing government spending in school districts throughout a given state or merging neighboring districts into "megadistricts" indicate that larger district size, not pupil expenditures, is associated with lower standardized test scores. The success of experiments in decentraliization, in local control of schools, and in parent choice indicate the value of structural reforms. Statistical data are included on two tables. Forty-three footnotes are included. (FMW)

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# EDUCATION: IS AMERICA SPENDING TOO MUCH?

by John Hood

When A Nation at Risk made its spectacular appearance in 1983, chronicling the deterioration of American schooling and the ignorance of graduates, the educational reform debate featured a cacophony of voices. Vastly different schools of thought were competing for center stage. Advocates of progressive education, who wanted to dissolve structured curricula and competitive grading, battled it out with tradition-minded conservatives seeking a return to school prayer, paddling, and the pledge of allegiance. Fad schools based on the ideas of Dewey, Montessori, and Piaget were still in vogue. Political interest groups fought to introduce their pet causes, such as the nuclear freeze and sexual abstinence, into the school day. Busing, city-county mergers, and other forms of integration were still causing dissension. People debated the wisdom of lengthening the school year, teaching foreign languages in elementary schools, tracking skills, and other substantive proposals.

Today, after almost seven years of nonstop reform talk, cacophony has become chorus. Among politicians, teachers' groups, the prestige press, and educational bureaucrats, the great questions of American schooling have degenerated into a single message: the United States is not "investing in human capital"--in other words, we are not spending enough on education.

The recent educational summit in Charlottesville, Virginia, demonstrated the current unison. President Bush and 49 state governors met at what South Carolina's Republican governor, Carroll Campbell, called "a national summit . . . to focus on the role of the Federal Government." Democratic governor Buddy Roemer of Louisiana told the president to "send money," and Gov. Bill Clinton of Arkansas, also a Democrat, called for "a bipartisan national plan to rescue the nation's educational system" and suggested adoption of "a national set of performance goals."[1]

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The media now banter about financing with exuberant ease. President Bush, who wants to be known as the Education President, won't put his money where his mouth is, network anchors confide with knowing smiles. In the realm of international business competition, write crusty Washington Post business reporters, America doesn't have the will to make tough investment choices. And compassionate commentators remark on the poor rural school district that spends only half as much per pupil as does the nearby city district--as if that means rural students receive half the education their urban peers do.

For most Washington politicians and the national media, how education should be structured and directed has become simply a question of dollars and cents; they assume that each increment of funding creates an increment of learning. Their fixation is completely divorced from reality. In the past three decades, spending on education has risen steadily to a level unsurpassed in U.S. history and, indeed, to one of the highest in the world. Meanwhile, academic researchers have conducted study after study, trying to find evidence for the spending-equals-learning theory. They haven't. And all the while, experiments in the trenches--from inner-city schools in Harlem to suburban schools in Minnesota--have been demonstrating that local control and parental choice, structural changes that are money neutral, hold the key to real educational reform.

Somehow such major news events have escaped the notice of the reform chorus, whose members continue, undaunted, to peddle their flawed vision of our educational woes. Theirs is a bill of goods that Americans, frustrated with inferior schools, will certainly buy--unless they get better consumer information.

## The Myth of Underinvestment

There has never been a time in recent U.S. history when government (federal, state, and local) has stopped "investing" in education. From the 1929-30 school year, the first on which comprehensive data are available, to the 1986-87 school year, total real expenditures per pupil in American public schools rose by 500 percent.[2] More recently, total real expenditures shot up from $2,229 per pupil in 1965-66 to $4,206 per pupil 20 years later, an 89 percent hike. Keep in mind that this increase was after inflation, meaning that actual buying power available to schools almost doubled during that period. Real spending in the 1980s, during all the Reagan-era cuts we hear so much about, actually grew at a

faster rate--21 percent between 1981-82 and 1986-87--than in the previous decade, when it increased by "only" 16 percent.

Naturally, the reform chorus tries to downplay the fact that spending is up, has always gone up, and given current trends, will continue to go up. Some of the more unscrupulous choristers use measures, such as year-to-year changes expressed as gross dollar amounts, to show that spending increases have been less than steady.[3] That practice, of course, ignores the effect of the baby boom--there were significantly fewer students in the 1980s than there were in the 1960s. Adjusting for expenditure per pupil is the only way to relate spending to the number of students enrolled.

The National Education Association, however, is more careful about its statistics in this instance. Its most recent Estimates of School Statistics reports accurately that current expenditures per pupil (similar to the measure used above, but excluding such costs as school construction) have risen about 31 percent since 1978-79.[4] That would seem to be a major increase, after inflation, but the NEA reports it as an increase of "only" 31 percent. The fact that American public schools have on average almost a third more resources to commit to teaching children today than they did only 10 years ago is treated as a failing of government. The NEA's perspective is, in a word, bizarre. In the text accompanying the data, the NEA remarks:

> The financing of public elementary and secondary schools presents several challenges to educators and policymakers in the current context of educational reform, state-local fiscal constraint, enrollment growth, teacher shortages, and the deficit-reduction policies pursued by the national government.[5]

What's so challenging about learning to live with 31 percent more money per pupil?

Compared with that of the rest of the world, American governments' investment in education is lavish indeed. Although precise comparisons are difficult, because of differences in demographics and the varying ways countries organize their educational systems, figures published yearly by the United Nations reveal that the United States spends more on education as a percentage of its gross national product, 6.8 percent in 1986, than do most of the countries whose students outperform U.S. students on standardized tests (see Table 1).[6] A few telling examples follow.

Table 1

International Comparisons of Educational Spending and Achievement

| Country | Percentage of GNP, 1986 | Math Scores vs. U.S. 1982 | Math Scores vs. U.S. 1988 |
|---|---|---|---|
| Israel | 10.2 | Same | -- |
| Sweden | 7.6 | Worse | -- |
| Canada | 7.4 | Better | Better |
| Netherlands | 6.9 | Better | -- |
| United States | 6.8 | -- | -- |
| Ireland | 6.7 | -- | Better |
| France | 6.1 | Better | -- |
| Finland | 5.9 | Better | -- |
| Belgium | 5.5 | Better | -- |
| Luxembourg | 5.2 | Worse | -- |
| United Kingdom | 5.2 | Better | Better |
| Japan | 5.1 | Better | Better |
| South Korea | 4.5 | -- | Better |
| Spain | 3.2 | -- | Better |

Sources: Percentages are from United Nations Educational, Scientific, and Cultural Organization, Statistical Yearbook 1988 (Paris: UNESCO), pp. 4-11 to 4-18. Scores for 1982 are from International Association for the Evaluation of Education Achievement, "Second International Mathematics Study," in U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics 1988 (Washington: GPO), p. 342. Scores for 1988 are from Archie E. Lapointe, Nancy A. Mead, and Gary W. Phillips, A World of Differences: An International Assessment of Mathematics and Science, Report no. 19-CAEP-01 (Princeton, N.J.: Educational Testing Service, January 1989).

West Germany. Total educational expenditures of West German governments come to 4.6 percent of the GNP, or about 9 percent of total government spending.[7] Yet it would be hard to say that West Germany, with its booming high-tech economy, is underinvesting in human resources.

Spain. Spain is not usually considered a chief competitor of the United States or an economic success. Yet Spanish students do as well as or better than American students on achievement tests. On the International Assessment of Education Progress test, administered in 1988, Spanish students ranked 8th in a field of 12 in mathematics proficiency.[8]

The United States was 12th. Spain also fared slightly better than the United States in science proficiency.[9] But Spanish governments spend only 3.2 percent of the country's GNP on education, less than half the U.S. percentage.[10]

South Korea. Another unlikely rival, Korea, spends 4.5 percent of its GNP on education.[11] On the 1988 IAEP test, Korea ranked first in mathematics proficiency and tied for first in science proficiency.[12]

Japan. Although our premier trading rival makes better cars, electronics, and countless other products than we do, Japanese children--according to the reform chorus--are poorly served by the public schools; government expenditures on education total only 5.1 percent of the GNP.[13] However, as is commonly known, Japanese students excel in international comparisons of mathematical and scientific knowledge.

Some analysts warn that cross-country comparisons of spending on education ignore an important variable: the level of private or church spending for education.[14] In Japan, for instance, most students attend special private schools at night and on Saturdays. That type of expenditure is not reflected in UNESCO's comparisons, but that doesn't alter the finding that the large amounts the U.S. government spends on education are not matched by foreign countries whose children are better educated. It may well be (as argued below) that the private nature of educational activities in those countries is a crucial factor in their success.

Again the reform chorus selects and distorts the data to try to portray the United States as parsimonious. For example, a full-page ad in U.S. News & World Report for the National Education Association starts out:

> It's a simple fact recognized by nations around the globe: The greater the educational investment, the greater the ability to compete in an increasingly complex world. But just how great is America's investment compared to the investment other countries make? Sweden spends more money per person on education. The Soviet Union's investment in education has created a higher literacy rate. And Japan's investment in education is producing more scientists and engineers. Right now, eight nations invest more money per person on education than we do. Their governments know that in global competition, the smarter you are, the stronger you are.[15]

The ad concludes by urging: "Get Smart, America. Invest in Education."

That ad is very misleading. Of the eight nations that "invest" more per pupil than does the United States, the NEA ad lists only one, Sweden, which is not one of the many countries whose students consistently outperform American kids. The list does include two other countries, Japan and the Soviet Union, whose pupils beat U.S. students on most tests even though their governments spend no more on education than we do. By lumping Sweden with Japan and the Soviet Union, the NEA distorts the evidence in an attempt to prove its case, which as we have seen is unsupported by the actual data. (One wonders why the Netherlands, a country that both outperforms and outspends us, was not included in the list.)

## Spending and Learning Aren't Linked

Try as they may, researchers have not been able to prove the common assumption that the richer schools are, the better taught are their students. More precisely, while it is obvious that a school that spends $4 per pupil a year will probably do a poorer job than one that spends $4,000 per pupil, it's not so clear that a school that spends $2,500 per pupil is less capable of providing a good education than one that spends $4,000. That magnitude of difference does not appear to be a significant predictor of educational success.

Certainly the historical trends fly in the face of the spending-equals-learning thesis. As noted above, total real spending on education grew by 89 percent from 1965-66 to 1985-86. Yet during the same period, average Scholastic Achievement Test scores of college-bound high school seniors fell 16 points on the mathematics test and 30 points on the verbal test;[16] the percentage of 17-year-olds who graduated from high school fell;[17] and other measures of educational achievement also showed a downward trend.

The Washington, D.C., area is a perfect case in point. In 1987 D.C. public schools spent over $5,700 per pupil--compared with the national average of about $4,000.[18] In the same year Maryland spent $4,400 per pupil and Virginia spent $3,800. But are D.C. students that much more educated than their peers in Maryland and Virginia? Quite the contrary: D.C.'s graduation rate was 55 percent, Maryland's was 75 percent, and Virginia's was 74 percent (the U.S. average was 71 percent). D.C. students had, on average, lower scores on the SAT and achievement tests as well. There is obviously a

better prescription for educational success than government spending.

In 1987 researchers Herbert J. Walberg and William J. Fowler, Jr., studied the relationship between per student expenditures and achievement scores in New Jersey schools for Educational Researcher.[19] They found that although the socioeconomic levels of school districts correlated moderately well with achievement (rich kids typically outperformed poor kids), actual spending per pupil was not linked to achievement. "It is not the level of expenditures that counts in learning," they remarked, "but what teachers do. Several thousand studies in educational psychology show that some techniques work much more powerfully and consistently than others, and do not necessarily cost more money."[20]

One reason rich school districts don't do a better job than poor ones is familiar: profligate government spending results in waste. In a 1982 study, education researcher S. J. Carroll wrote:

> School districts broadly agree on what constitutes an acceptable instructional program and they exert every effort to provide one. In doing so, low-revenue districts concentrate on necessities and make do with disproportionately few non-instructional resources. Districts with higher revenue per pupil provide a somewhat costlier instructional program, but they devote much larger shares of their budget to non-instructional purposes.[21]

Several studies have sought to compile all the relevant research on educational expenditures and achievement and draw a conclusion from the preponderance of the evidence. Invariably, the conclusion has been that the link is tenuous at best. In May 1989 Eric Hanushek of the University of Rochester released his latest survey of the field (see Table 2). He reported that of 65 studies of the relationship between expenditures and pupils, only 20 percent found any evidence of a positive impact of spending on learning, 75 percent found no impact, and about 5 percent found a negative impact.[22]

## Money-Based Reform Detours

Despite the stubborn refusal of the empirical data to support the spending-equals-learning thesis, the choral advocates of educational reform in the middle and late 1980s

have maintained an inordinate focus on money. Let us briefly examine two of their proposals: teacher-related changes (pay hikes, workload, quality issues) and school district equity.

Table 2

Educational Spending, Other Factors, and Student Performance

| Factor | Number of Studies | Impact (%) | | |
|---|---|---|---|---|
| | | None | Positive | Negative |
| Expenditure per pupil | 65 | 75 | 20 | 5 |
| Teacher/student ratio | 152 | 82 | 9 | 9 |
| Teacher education | 113 | 88 | 7 | 5 |
| Teacher experience | 140 | 64 | 29 | 7 |
| Teacher salary | 69 | 78 | 16 | 6 |
| Administration | 61 | 87 | 11 | 2 |
| Facilities | 74 | 84 | 9 | 7 |

Source: Eric A. Hanushek, "Impact of Differential Expenditures on School Performance," Educational Researcher 18, no. 4 (May 1989): 45-49.

## Teachers

It is just plain common sense to examine the provider of a service--in education, the teacher--when the service is deteriorating. Thus, we have been bombarded with stories about teachers--stories that are cheered by teachers' unions and others that advocate "getting tough" with inferior teachers.

First, it is constantly asserted that teachers are "underpaid." Everyone has a teacher in the family who is only too happy to support that assertion with personal testimony; both my parents work in elementary education, so I've heard the complaints all my life. But the data show that teachers are reasonably well paid--they're not rich, but they are far from starving.

Most analyses of teachers' salaries leave out the fact that teacher pension plans are, on average, more generous than are those available to private-sector employees: 22 percent of salary compared with 19 percent for private workers.[23] In some states, such as California and New York, teachers'

pensions are 35 percent of salary. Keep in mind that those pension plans were established decades ago; the large increases in spending on education over the last few years may push pension figures even higher.

One also has to take into account the fact that teachers are given summer and other vacations. They work about 180 days a year, and their regular workday, at least, averages less than the usual eight hours.[24] It is true that night grading and other off-campus work should be factored into the equation, but one would be hard pressed to prove that teachers actually work more hours a week than many private-sector employees. (They do get up earlier than most, and working with kids all day long probably merits hazard pay, but the salary crisis is nevertheless overblown.)

States have focused a great deal of attention on teachers' workloads, on the assumption that class size is a significant determinant of educational quality, and hiring more teachers has been proposed as a remedy. Again the evidence indicates otherwise. First, the number of students per teacher in public schools (some might call this measure "educational productivity") shrank steadily from an average of 27 in 1955 to 17 in 1988.[25] No educational improvements are apparent. Also, many of our constant foils--Japan, Korea, Spain, and France, for starters--average more students per teacher than does the United States (Korea's ratio is 55 for every teacher).[26] A U.S. Department of Education study stated in 1988 that efforts to boost student test scores through smaller classes "will probably be a waste of money and effort";[27] Walberg and Fowler are even more direct:

> Pupil-teacher ratios or class sizes are among the weakest effects on learning, except at class sizes below about five to ten, which amount to tutoring groups.[28]

A reduction in class size from 20 to 18, let's say, probably won't affect the teaching style or behavior of teachers very much. It will, however, reduce their grading workload, which is one reason the NEA and other teachers' groups support class size reduction.[29]

In addition, the quality of teaching has become the subject of much discussion and experimentation. Merit pay, "master teacher" programs, and other reforms have been tried--despite the vehement objections of teachers' unions, it should be noted--but the results are mixed. Take merit pay, which sounds like a solid, market-based approach: pay the best

teachers more and the inferior teachers less, and you'll have a better product.

In practice, there are a number of problems with implementing merit pay. Administrators don't want the extra responsibility of discriminating among teachers, which is understandable, but that creates real problems for merit programs in which outside evaluators judge teachers on the basis of one or two visits to the classroom.[30] School districts are trying to superimpose a private-sector perspective on an enterprise that is still, in most areas, centrally controlled and financed. Unless principals can be allowed, and ordered, to reward their teachers on the basis of steady, day-to-day observation, merit pay will flop. Another approach, master teacher programs that increase the stipends of good, experienced teachers and give them some administrative duties, has also failed in real-world tests. Its chief failing is that taking the best teachers out of the classroom part of the time, even to give advice to struggling teachers, makes no sense at all.[31]

Given the problems with teacher-based reforms, it should come as no surprise that studies have identified few benefits from them. Overall, according to Hanushek's survey, 78 percent of studies on teachers' salaries found that they had no impact on students' performance.[32]

## School Equity

The reform chorus has lately been singing the praises of equity reforms, which seek to equalize government spending on school districts throughout a given state. Such plans have been implemented in many states, including California, Kansas, Florida, and North Carolina.[33] The latest equity issue has surfaced in Texas, where the state supreme court decided 9 to 0 in October to scrap the state's school finance system, accused by the court of creating "glaring disparities."[34] The court ordered the Texas legislature to develop a new funding scheme in seven months. Kentucky and Montana have come under similar court orders this year, while New Jersey, Minnesota, and Oregon await the decisions of their highest courts on the matter.

It's hard to believe the current focus on equity finance given the copious research on the weak link between expenditures and educational success.[35] Equity reforms do everything that research says is wasteful and counterproductive: redistribute funds from rich to poor districts; increase centralized state control over curriculum and management;

and focus public and governmental attention on teachers' salaries, class sizes, and per pupil spending.[36] Unfortunately, more than a few proponents of equity reform see a parallel between equalizing spending across a state and equalizing spending nationwide. "Some students are more fortunate than others--simply by geographic accident," states Professor Allan Ornstein of Loyola University matter-of-factl "State residence has a lot to do with the quality of educatic received."[37]

A related idea--merging nearby school districts into a larger megadistrict--has also been studied extensively. Mergers are supposed to increase equity and efficiency. A typical merger involves an unsuccessful city system that is largely black and a successful county system with mostly white students. Strangely enough, in many cases the city system spends more per student than does the county system. Durham, North Carolina, for example, has a predominantly black city system that spends $3,745 per student and a largel white county system that spends $3,468--but still people are urging merger on the grounds of fairness to city students.[38]

Meanwhile, studies show that the larger districts formed by mergers yield low achievement and poor student, staff, and parent morale. The study of New Jersey schools conducted by Walberg and Fowler found that, in all cases, larger distri enrollments were associated with lower test scores:

> The results contradict the hypothesis sometimes put forward that large districts are more efficient. . . . These striking trends confirm other recent studies of district size and suggest that the policy of district consolidation undertaken by states in this century may have hurt rather than helped learning since they suggest diseconomies rather than economies of scale.[39]

## The Prospect for Real Educational Reform

Teaching reforms, equity financing, and other money-based detours have distracted American policymakers while more effective structural reforms have, with less publicity, proven their worth. Experiments in decentralization, local control of schools (in Chicago, by parent-teacher councils), and parental choice have been adequately reported elsewhere, but a few points about school finance and public opinion are in order.

First, the school districts that have had the most success with local control and choice, such as East Harlem, New York, started out at the bottom of the barrel in terms of per pupil expenditure and student performance. Allowing choice to create a market for education, with the requisite gains in teaching effectiveness, management, and student achievement, is basically a revenue-neutral change. Since that flies in the face of all the assertions about underinvestment and spending causality, the NEA, the prestige press, and other members of the chorus must have either ignored or misunderstood the test cases. After all, the very foundations of their beliefs about education and government are called into question by choice reform successes.

Mary Hatwood Futrell, former NEA president, revealed a curious inability to even understand the case for choice in a recent column:

> Choice plans raise a number of important issues. What is the fate of public accountability under choice arrangements? How can parents influence school boards in districts where they do not live, vote, or pay taxes? And what will happen to the schools, to the students--and to the school districts--left behind?[40]

That parents won't have to lobby to demand changes any more, that they can instead use the power of the marketplace to demand what they want in schools, seems to have escaped Futrell. And her concern for schools that fail to retain students demonstrates a blindness to the need for <u>real accountability</u>. In fact, later in the column she endorses a part of a choice plan proposed for Seattle, Washington, that would, in effect, subsidize failure by helping schools that lose students. Such an approach would subvert the purpose of using market discipline to encourage on-site school innovation.

The American public, moreover, has not yet realized that the successful choice experiments (which they support) discredit the standard raise-taxes-to-invest-in-schools line (which they also support). According to the Gallup Organization's comprehensive 1987 poll on educational issues, 71 percent of respondents supported giving parents "the right to choose which local schools their children attend."[41] Parents were less sanguine about voucher systems that pay for public, private, or parochial schooling. Only 49 percent of parents with school-aged children said they wanted a voucher plan adopted--a plurality but still a large drop-off from the level of support for choice among public schools.

At the same time, respondents wholeheartedly supported other reforms, such as national minimum standards, that would increase centralized control rather than weaken it.[42] Although Americans know intuitively that local control is best (62 percent were for more local control in general vs. 15 percent against), their sources of information on specific proposals--the news media--keep the focus on teaching reforms, class size reductions, equity financing, and other irrelevant proposals. In a 1988 Gallup poll, 64 percent of Americans said they were willing to pay higher taxes for better schools, a 6 percent increase since 1983.[43]

Those results should not be interpreted as public endorsement of more spending for education. Americans are desperate; they know the public schools are failing to provide their children with crucial skills, particularly in math and science, that will determine their economic fate. In the absence of any alternatives, Americans will pay more taxes in hopes of improving schools.

Sadly, though, more money will not improve our schools. The history of funding for education over the last three decades, the overwhelming consensus of academic research, and the common sense principles of market efficiency establish that conclusion with undeniable finality. Only structural changes that give parents the power to demand quality in an educational marketplace will achieve real results. But this fact, supported by principle and experience, hasn't yet changed the reform chorus's tune. With knowing smiles, chorus members continue to call for more "investment," for "putting your money where your mouth is." They are smug--and they are wrong.

## Footnotes

[1] William Safire, "Federal Role in Education Should Be Limited," Conservative Chronicle, October 11, 1989, p. 23.

[2] U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics 1988 (Washington: GPO), Table 114, p. 132.

[3] See, for example, Robert Berne, "Equity Issues in School Finance," Journal of Education Finance (Fall 1988): 159-80.

[4] National Education Association, Estimates of School Statistics 1988-89 (Washington: NEA, 1989), p. 24.

[5] Ibid., p. 20.

[6] United Nations Educational, Scientific, and Cultural Organization, Statistical Yearbook 1988 (Paris: UNESCO), pp. 4-11 to 4-18.

[7] Ibid., p. 4-17.

[8] Archie E. Lapointe, Nancy A. Mead, and Gary W. Phillips, A World of Differences: An International Assessment of Mathematics and Science, Report no. 19-CAEP-01 (Princeton, N.J.: Educational Testing Service, January 1989), p. 5.

[9] Ibid., p. 8.

[10] UNESCO, p. 4-18.

[11] Ibid., p. 4-14.

[12] Lapointe et al., pp. 5, 8.

[13] UNESCO, p. 4-14.

[14] See, among others, editorial board, "Lauro's Themes," New Republic, July 10, 1989, p. 7.

[15] U.S. News & World Report, October 16, 1989, p. 104.

[16] U.S. Department of Education, Table 88, p. 108.

[17] Ibid., Table 32, p. 46.

[18] Lawrence Feinburg, "U.S. High Schools Stagnating, Cavazos Says," Washington Post, May 4, 1989, p. A18; Carol Innerst, "Education Stagnation Scares Cavazos," Washington Times, May 4, 1989, p. A10.

[19] Herbert J. Walberg and William J. Fowler, Jr., "Expenditure and Size Efficiencies of Public School Districts," Educational Researcher (October 1987): 5-13.

[20] Ibid., p. 12.

[21] S. J. Carroll, "Search for Equity," in Financing Education: Overcoming Inefficiency and Inequity, ed. Walter W. McMahon and Terry G. Geske (Urbana: University of Illinois Press, 1982).

[22] Eric A. Hanushek, "Impact of Differential Expenditures on School Performance," Educational Researcher 18, no. 4 (May 1989): 45.

[23] Myron Lieberman, "Are Teachers Underpaid?" Public Interest (Spring 1987): 16.

[24] Ibid., p. 17.

[25] U.S. Department of Education, Table 51, p. 67.

[26] Lapointe et al., p. 10.

[27] "Paring Class Size Costly, Futile, U.S. Report Says," Los Angeles Times, March 31, 1988, p. 3.

[28] Walberg and Fowler, p. 6.

[29] Richard Vedder, "Small Classes Are Better for Whom?" Wall Street Journal, June 7, 1988, p. 15.

[30] Lieberman, p. 26.

[31] Ibid., p. 25.

[32] Hanushek, p. 48.

[33] James Gordon Ward, "The Political Ecology of Reform: American Public School Finance in the 1970s and 1980s," Journal of Education Finance (Fall 1988): 182-99.

[34] "How Courts Are Trying to Make Schools Equal," U.S. News & World Report, October 16, 1989, p. 36.

[35] In fact, many recent articles pushing equity finance reform state that research on the subject in the 1980s has been "scant," despite the copious and revealing work of Walberg, Hanushek, and John Chubb at the Brookings Institution. That shows how little they are following research trends. See James Gordon Ward and William E. Camp, "An Analytic View of Two Decades of Reform in School Finance," Journal of Education Finance (Summer 1988): 1.

[36] For research on the impact of state mandates on local schools, see Linus Wright and Deborah Inman, "The Impact of Education Reform on Local School Districts," Journal of Education Finance (Summer 1988): 7-17.

[37] Allan C. Ornstein, "State Financing of Public Schools: Policies and Prospects," Urban Education 23, no. 2 (July 1988): 191.

[38] Linda Fox, "Triangle Schools Rank High in Local Spending," News and Observer, October 26, 1989, p. 12T.

[39] Walberg and Fowler, p. 12.

[40] Mary Hatwood Futrell, "Real Parental Choice," Washington Post, January 15, 1989, Outlook, p. 7.

[41] Gallup Report, October 1987, p. 5.

[42] Ibid., p. 8.

[43] Gallup Report, October 1988, p. 33.

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